

ponding joint is but slightly broader than the preceding ones and not as long as joints 3 and 4.

4. In *sinuata* the basal portion of the vitta is nearly parallel to the suture, and the middle portion very little or not at all narrower than the distal, while in *vittata* the basal portion bends towards the suture and the middle portion is decidedly narrower than the distal.

5. In *sinuata* the prothorax is twice as wide as it is long, while in *vittata* its width is only about one-third greater than its length.

A SPECIES OF MEGASTIGMUS REARED FROM LARCH SEEDS.*

BY S. MARCOVITCH, ITHACA, N. Y.

On September 10, 1913, the seeds of the larch trees, *Larix laricina* Du Roi, around the Cornell insectary, Ithaca, N. Y., were found to be infested by a white larva. The seeds were kept indoors during the winter, and on April 2, 1914, the first adults of a species of *Megastigmus* emerged. The larva completely devours the kernel, and fills the entire seed making it difficult to open one without injuring the larva. Examined on July 17, the larvæ were nearly two-thirds grown. That it feeds on the kernel as do all of the known American forms of this genus is quite conclusive, since only one kind of larva was found in the seeds. This species is apparently undescribed.

Megastigmus laricis, n. sp.

Female.—Length 2.1 mm.; abdomen 1 mm.; ovipositor 1.6 mm. General colour black; face, front nearly to base of the antennæ yellowish; occiput, antennal grooves, and vertex, black; posterior eye-margin and cheeks, dark brown. Prothorax black, and finely rugulose. Anterior portion of mesonotum smooth, posterior part with fine transversely curved striæ. Scutellum finely rugulose. Propodeum finely reticulate-punctate with a medium longitudinal carina, which is broken in the middle. Antennæ brown, scape yellowish. Anterior coxæ yellow; middle coxæ brownish yellow; posterior coxæ black; rest of legs brownish yellow, except femora,

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which are brownish black, but lighter at the tip. Wings hyaline. Abdomen shining black, sometimes with three indistinct yellow spots on the sides. Ovipositor brownish black.

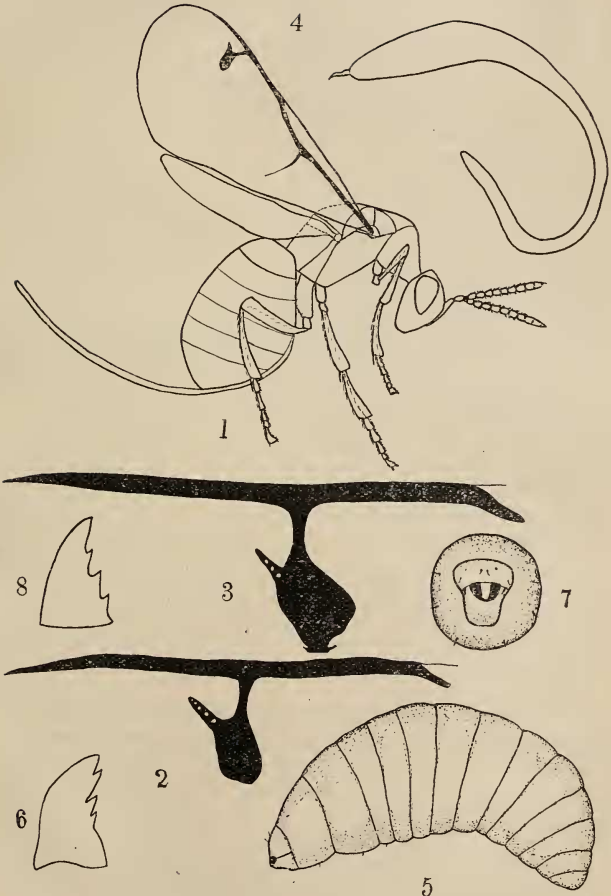
Male.—Length 2.5 mm.; abdomen 1 mm. Vertex and occiput black; face, cheeks and upper portion of front, yellow; portion bordering the upper posterior angle of the eye brownish. Whole dorsal aspect of thorax black. The brownish spot on the sides of the prothorax somewhat rectangular, and more distinct than in the female. Antennæ brownish, scape yellow. Front coxæ yellow; middle coxæ brownish, black towards base; hind coxæ black. Legs yellowish. Stigmal club somewhat truncate behind. Propodeum finely reticulate-punctate with an indistinct longitudinal median carina. Abdomen brownish black, lighter beneath.

Larva.—Length 2.1 mm.; width 9 mm. Colour dull white, middle segments a little darker. The mandibles are brownish, and armed with four teeth (Fig. 6). Supporting the mandibles is a thick fleshy labium, thicker on the caudal end. The larva is sparsely clothed with short setæ.

Egg.—The egg as obtained by dissection of the female is white, smooth, and spindle-shaped, with a long pedicel at one end, and a vestige of one at the opposite end. Length of body of egg .22 mm.; tail-like process .44 mm.; vestige .031 mm.

Described from 15 females and 12 males, Ithaca, N. Y., July 17, 1914. Types deposited in the Cornell University collection.

Specimens were compared with *Megastigmus atedius* Walker in the Oxford Museum by C. O. Waterhouse. The latter is 4 mm. long; the striæ of the thorax are coarser, and the stigmal club is nearly circular. Specimens were also compared with *Megastigmus japonicus* and *Megastigmus koebeleri* Ashmead, by J. C. Crawford in the U. S. National Museum. *M. japonicus* is entirely yellow. The striæ of the mesonotum are coarser and straight. They are much more strongly elevated than in *laricis*, and continue across the parapsoidal areas. *M. koebeleri* has the dorsum of the thorax green, with the transverse striæ much coarser. The parapsoidal furrows are indistinct, and the apical part of the scutellum has a finer sculpture than the basal part.



MEGASTIGMUS LARICIS, N. SP.

According to Crosby's table of the North American species of *Megastigmus* (Ann. Ent. Soc. Am., VI, p. 156, 1913) this species runs down to *M. lasiocarpi* Crosby. I have rearranged his table to include the present species as follows.

TABLE OF SPECIES (FEMALES).

1. Ovipositor not longer than abdomen.....	2
Ovipositor longer than abdomen.....	3
2. Stigmal club oval	<i>brevicaudis</i>
Stigmal club elongate	<i>physocarpi</i>
3. Front wings marked with a brownish spot adjoining the hind margin of the submarginal vein.....	<i>albifrons</i>
Front wings not so marked.....	4
4. Stigma surrounded by a clouded area.....	<i>nigrovariegatus</i>
Stigma not surrounded by a clouded area	5
5. Mesonotum black, with an oblong reddish orange area covering the posterior half of the middle lobe, the inner angles of the scapulæ and axillæ and all of the scutellum.....	<i>pinus</i>
Not so marked.....	6
6. Black species.....	7
Yellow species.....	9
7. Pronotum with two yellow spots.....	<i>tsugæ</i>
Pronotum black without yellow spots.....	8
8. An elongate yellow spot on each side of the prothorax; length 3.7 mm.	<i>lasiocarpi</i>
Sides of prothorax black; length 2 mm.....	<i>laricis</i>
9. Axillæ yellow; stigmal vein as long as the club is wide	<i>spermotrophus</i>
Axillæ black except inner angle; stigmal vein shorter than width of the club.....	<i>aculeatus</i>

In the fall of 1913 I also found the larva of *Megastigmus physocarpi* Crosby in the seeds of *Physocarpus opulifolius* at Ithaca, N. Y. It is similar in form to the larva of *M. laricis*, and measures 1.9 mm. long by 8 mm. wide. The mandibles have four teeth (Fig. 8).

EXPLANATION OF PLATE XXVII.

1, *M. laricis*, female; 2, stigmal club of female; 3, stigmal club of male; 4, egg; 5, larva; 6, mandible of larva; 7, head of larva from in front; mandible of larva of *M. physocarpi*.